4905 Village Drive
Fairfax, VA 22030
(703) 273-1304

February 3, 1990

R. Tettenhorst
P.O. Box 14020
Saint Louis, Missouri 63178

Dear Tet,

I just received you letter requesting one case to display your 1854 and 1856 half cents. There are plenty of cases and I have reserved one in your name.

I am looking forward to a wonderful convention. Bill, Rick, and I have, I think, settled on this year's half cent happening varieties--1795 C-6 a and b (to finish that year), 1802 C 1 and 2, and 1826 C 1 and 2. A nice diversity of common to rare, plain vanilla to interesting die states, undertypes, etc. It should be an interesting happening. We are toying with the idea of reserving an exhibit case to display some of the more interesting pieces from the happening, owners willing. This will allow those who miss the happening to see what they are missing, and those who attend to avail themselves of an instant replay. Do you have any thoughts on the idea?

I am afraid I do not have any new or interesting half cents to report. I've been concentrating on the Massachusetts coppers the past couple of years and have been neglecting half cents. I have been following auction prices realized and it is obvious that the competition for nice pieces is very keen.

I trust you are aware that Roger has been having some health problems recently. He spent all of January and part of December in the hospital, and seems to be on the mend at the moment. If you haven't been in contact with him recently, I'm sure he would like to hear from you.

I'll see you in Orlando.

Mike

MIKE PACKARD
4905 VILLAGE DRIVE
FAIRFAX, VA 22030

January 5, 1994

Mr. R. Tettenhorst
PO Box 14020
St. Louis, MO 63178

Dear Tett,

A couple of weeks ago, I received a call from Mr. James Taylor of ANA asking if I would be willing to substitute teach the one-day course on half cents for you at ANA's seminar series on Early American Coppers. He said you and Davy would be touring Italy during that period in July 1994. I told him I would be delighted to sub for your this year.

I am more than willing to develop a course from scratch, but it occurs to me that I could save a lot of time, and be more consistent with your course, if I could borrow an outline, or perhaps even the class notes, from the course you gave. I would also like to talk with you about what the students wanted out of the course and what you would emphasize or deemphasize the next time around.

If possible, I would also like to borrow some half cent slides. I do not have any of my own. Mr. Taylor said the ANA had some he could send to me, but I recall you had excellent slides of error half cents and the 1856 pattern for your talks at the EAC educational forum. I would not want the slides before the EAC Convention, but would like to know what you might have available.

I attempted to call you, but the number I have ((313) 331-6503) is no longer in service. You can reach me at (703) 273-1304 after 7PM EST (where I prefer to take personal calls), at (202) 512-7250 during working hours, or write me at the above address.

I hope you and your family had a happy holiday season. I look forward to hearing from you and to seeing you in Las Vegas.

Sincerely,

Mike

Feedback forms, what they liked and didn't ...

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

January 27, 1994

Mr. Mike Packard
4905 Village Drive
Fairfax, VA 22030

Dear Mike:

I am enclosing a number of things, which may be more than you wanted.

1) First of all, there are two copies of the outline of my talk. One is a clean copy and the other one contains a number of handwritten notes which I added during my final run-through preparing for the course. The circled numbers represent pictures that I showed. The circled "x" indicates the point in the talk at which I intended to remove the picture from the screen.

2) Next, there are some handouts. These include a summary of the different years, a brief listing of the rarities, a summary of the major literature, including books, periodicals, and auctions.

3) This is a summary of the research question I placed before the class with respect to the thin planchet lettered edge half cent of 1794 and 1795. The basic issue is whether these should be considered new subvarities, errors, or trial pieces. (Please note that I intend to write an article about this for Penny-Wise, but have not yet written it. Therefore, I would appreciate your not circulating this information beyond the class.) The text of my remarks on this subject is in Section H of the talk. What is contained in attachment 4 are the slides that went with that section of the talk plus the written questionnaire that was handed out at the end. The results of the poll were primarily concentrated in the first two categories of belief that these coins represent new subvarities. However, that is probably a reflection of the obvious bias of the professor.

4) As I mentioned, I did not use slides for the pictures of the coins, which turned out to be a mistake. The overhead projector and the black and white pictures weren't fully satisfactory because the heat curled the pictures or melted the plastic covering them. The slides that I have are very badly organized. It is one of those projects that I have put off until I am eighty years old or too feeble to go out of the house. If you are going to use color slides and need some particular items, please let know. I will pretend that I am already enfeebled and try to find them for you if I have them.

5) I am also enclosing a copy of a courteous letter from Ken Bressett that I received after the class. He mentions comment sheets which were turned in by members of the class at the end of the week. You may want to ask him to let you see these comments for the purpose of helping you retain what was good and modify what needs to be improved.

6) Enclosed is a picture someone took in the school cafeteria of Denis and me eating lunch with a couple of students, whom you may recognize.

7) A roster of the class is also enclosed.

The library has copies of the major books by Gilbert, Cohen, and Breen. So you do not need to bring them. You may want to reconfirm that these are still available. In preparation for the class, I had ordered from Superior enough copies of the catalog for the sale of Roger's collection to give one to each member of the class. It's illustrative of the interest in die states, etc. which our most prominent collector displayed and demonstrated some of the different ways in which half cents can be collected. I still have an extra supply of these which I can send you if you would like to take them to the class. I do not have enough left for everyone, but several copies might be helpful to you.

I will be out of the country for most of the month of February, but will be glad to help in any way I can starting in March.

Looking forward to seeing you in Las Vegas, for which I am probably headed.

Sincerely,

R. Tettenhorst

mb

Enclosures

Mike Packard
4905 Village Drive
Fairfax, VA 22030

(703) 273-1304

February 15, 1994

Mr. R. Tettenhorst
P.O. Box 14020
St. Louis, MO 63178

Dear Tett:

Just a short note to let you know that I received the materials you sent late last month. They will prove very helpful. I will get them copied and return the originals to you. I haven't done so yet because the weather here has been so bad the last couple of weekends that I did not venture far from home.

At this point, I am leaning toward putting more emphasis on the first half cents (Massachusetts, my favorites), die engravers, planchet sources, condition and value, and attributing than your outline suggests you covered. I have not gotten much past the outline stage at this point, so I have not yet determined what slides I might ask of you. I have talked to Fred Borcherdt and he has agreed to let me photograph coins from his collection to augment those from my own. At the moment, I believe I will ask that you send me some slides of some of Davy's error half cents. I will let you know which ones in a month or so and I will hope that slides are available.

I find this exercise exciting, but more time consuming than I would have thought. In addition to all the ice we have received lately, I lost the hard disk on my computer. Most of my files were backed up to floppies, but I did manage to lose a few recently created files. I am up and running again and certainly will be more diligent in making copies of important files.

Hope your trip to Europe was a pleasant one (Olympics?) and that you managed to find a couple of long hidden half cents while you were there. I will be in touch before the EAC convention. Hope to see you there.

Sincerely,

Mike

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

June 7, 1994

Mr. Mike Packard
4905 Village Drive
Fairfax, VA 22030

Dear Mike:

Eric recently gave me a copy of the attached article from the May 1916 issue of "The Numismatist" which presents George Ross' list of half cent varities. This article was undoubtedly written almost simultaneously with the publication of Gilbert's book (March 1916). It would interesting to know if there was any connection. Thought you may want to have a copy for your files or even mention it at your presentation in Colorado this summer.

Sincerely,

Tett

R. Tettenhorst

mb
Attachment

MIKE PACKARD
4905 VILLAGE DRIVE
FAIRFAX, VA 22030

(703) 273-1304

July 17, 1994

Mr. R. Tettenhorst
P.O. Box 14020
St. Louis, MO 63178

Dear Tett,

I have been remiss in thanking you for all your assistance in helping me prepare for the half cent portion of this year's ANA Early American Copper seminar. Thank you. I thought you might like to look at the course outline and some of the components of the outline that I prepared, so I have enclosed a copy at the end of the materials you sent me last January. No doubt, you will see many striking similarities to the components you developed two years ago. I freely borrowed parts of your outline (imitation IS the sincerest form of flattery). I added the brief history and was pleased that I had done so when several (more than half the 12 enrolled) said they wanted some history when I asked them early on what they wanted most out of the course. Grading and attribution were popular topics of interest to the class also.

I had a nice slide show with coins from my collection and that of Fred Borcherdt. All in all, I think I had too many slides and not enough time with hands on study of the coins themselves. If I teach this, or a similar class again, I think I will spend more time with coins in the students' hands. We did not get to do as much on attribution, grading, and problems to watch out for as I would have liked. I think we often do things somewhat differently the second time around.

I had a blast. I hope you and Davy had a wonderful learning experience and time in Italy. Thank you for recommending me to James Taylor.

Sincerely,

Mike

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

August 15, 1994

Mr. Mike Packard
4905 Village Drive
Fairfax, VA 22030

Dear Mike:

Thanks for the note about your experience teaching the half cent portion of the ANA Early American Copper Seminar. I am delighted you had a good time, which I did, too. I agree that I would teach the class differently the second time. Having read your course outline, I would borrow some ideas from you also. In particular, I liked the attention that you gave to attributing half cents and the attribution exercises. Grading is a subject I feel a little uncomfortable with myself, but I was impressed by your comment that it was a popular topic. In my year, I ducked that subject to Denis Loring, but that was probably not fully satisfactory to those members of the class who were particularly interested in half cents. Thanks very much for the report.

Did you see the catalogue a few months ago in which some very intemperate letters from Roger Cohen to Jack Collins were auctioned off? Were you aware that Roger wrote Jack in those terms?

Sincerely,

Tett

R. Tettenhorst

mb

Course Outline

I. Introductions

   A. Name
   B. Hometown
   C. Primary collecting interests
   D. Experience collecting half cents

II. Course Overview

III. Brief History of Half Cents

IV. Definitions

   A. Types
   B. Subtypes
   C. Varieties
   D. Subvarieties
   E. Die States

V. Reasons to Collect Half Cents

VI. Ways to Collect Half Cents

VII. Attributing Half Cents

VIII. A Year-by-Year Tour of Half Cents

IX. Attribution Exercise

X. Introduction to Grading Half Cents

XI. Grading Exercise

XII. Sources of Information on Half Cents

XIII. Errors in the Minting Process (Time Permitting)

XIV. Half Cent Values (Time Permitting)

XV. Summary and Conclusion

III. Brief History of Half Cents

Through the Revolution, the main circulating coins were the Spanish dollar and the British Half Penny. Each colony had its own currency system and figured different coins at different rates. For example. the Spanish dollar was worth five Georgia Shillings, six of Virginia, seven shillings sixpence of Pennsylvania, eight of New York, and thirty-two shillings sixpence of South Carolina.

Gouverneur Morris developed (in 1782) a system for a unified currency by converting the different colonial rates to a common unit. The lowest common denominator for converting the various colony rates was 1,440, so under the Morris system, the Spanish dollar would equal 1440 units.

In June of 1783, Thomas Jefferson was elected to Congress and served as chairman of the currency committee. He found the Morris plan to be burdensome and suggested a decimal system based on a dollar equal to the Spanish dollar. Jefferson proposed a ten dollar gold piece, one dollar, half dollar, double tenth, tenth, and twentieth in silver, and a copper hundredth. Jefferson rejected the idea that a copper two-hundredth piece

was needed for transactions of the poor.

On July 6, 1785, Congress unanimously passed the plan of the Grand Committee, resolving among other items that the money unit of the United States would be the dollar and that the smallest unit would be a copper, 200 of which would equal one dollar. On August 8, 1786, it established weight standards for the various denominations. The cent was to weigh 157.5 grains (100 cents would weigh two and 1/4 pounds avoirdupois) and the Half Cent would weigh half that (78.75 grains). No devices were specified for the copper coins.

Two issues of copper coins were produced using this weight standard--the Fugio Cent and Massachusetts Cent and Half Cent. The Massachusetts coins were the first to bear the words CENT and HALF CENT. They were minted from late 1787, probably October, until January 1789. I estimate the mintage of the cents to be about 290,000 and the half cents, 120,000. There are nine varieties of 1787 half cent known (14 of the cent including three contemporary counterfeits) and 2 of the 1788 half cent (24 of the cent including one contemporary counterfeit). Production on Massachusetts coppers ceased because 1) the slow minting pace caused costs to rise beyond expectations (the mint was authorized to produce $70,000 in coppers per year, but produced only $3,493 in 16 months of operation) and 2) Massachusetts ratified the

Constitution, which prohibited states from coining money.

On March 3, 1791 the Congress passed a resolution calling for the establishment of a mint, but the resolution contained no specifics. The Act of April 2, 1792, contained the specifics, including new authorized weights for the various denominations. The cent was to weigh 264 grains of pure copper and the Half Cent, 132. The weight of the Half Cent would be eight to 15 percent below the authorized weights of the Connecticut (144 grains), New Jersey (150 grains), regal halfpenny (152.6 grains), Fugio and Massachusetts Cents (157.5 grains). It would be about 20 percent heavier than the authorized weight of the Vermont copper (111 grains) and almost two-thirds heavier than the Massachusetts half cent. This act made gold and silver coins legal tender for all debts, but the copper denominations were not legal tender.

The April 1792 Act did not authorize the mint to purchase copper for striking cents and half cents. This oversight was corrected by an Act of May 8, 1792 which authorized the purchase of up to 150 tons of copper for cents and half cents. The Mint advertised in Dunlop's Daily Advertiser (Philadelphia) beginning on September 3, 1792 offering the highest price for scrap copper. (Eric Newman displayed a copy of this ad at the 1992 EAC Convention in St. Louis, Mo.) Quantities offered (notably copper

nails, spikes, utensils, and the copper fittings of wrecked ships) were woefully insufficient to meet the mint's needs and the mint contracted with Sweden for 30-40 tons of copper at an estimated cost of $9,000 to $10,000. Copper sheets were also purchased from England. After April 1797, the mint purchased prepared cent planchets from Boulton and Watt and from Governor and Company (Coltman Brothers) of Birmingham, England. The Governor and Company planchets were of poor quality. The mint did not purchase half cent planchets until 1800 (from Boulton and Watt).

The Act of January 14, 1793 reduced the weight of the cent from 264 grains to 208 grains (more than a 20 percent reduction), and that of the Half Cent from 132 grains to 104 grains. United States Cents were first minted in February 1793 and delivered to the Mint Treasurer in March 1793. Half Cents were not minted until July of that year with deliveries of Half Cents being made to the Mint Treasurer on July 20th, July 26th and September 18th.

The obverse of the 1793 half cent is patterned after the Libertas Americana medals with a figure of Liberty facing left. A pole rests on her right shoulder and a pileus or Roman cap of freedom sits atop the pole. The word LIBERTY lies over the bust and the date of issue, 1793, rests below. A series of beads

encircles the rim. The reverse has HALF CENT at the center surrounded by two laurel branches of leaves and berries. Between the branches and the circle of beads at the rim are the words UNITED STATES OF AMERICA. The fraction 1/200 lies between the stems of the branches. The edge is lettered TWO HUNDRED FOR A DOLLAR followed by two leaves. The edge was applied using a Castaing machine.

There is some uncertainty as to who the die cutters for the 1793 half cents were. Cohen concludes that Joseph Wright cut the dies for the "flowing bust" and that Adam Eckfeldt copied this die for the "hooked bust" obverse die. Breen theorizes that Robert Birch, perhaps with the help of Joseph Wright, cut the obverse dies while Birch and Eckfeldt cut the reverse dies.

Joseph Wright died in September 1793 of yellow fever and Robert Scot, who engraved plates for paper money, was hired in November 1793 to be the Chief Engraver. Scot used a hub prepared by Joseph Wright to impress the bust into several 1794 large cent dies. No doubt he realized this was a time saving device so he, perhaps with the assistance of Eckfeldt, prepared a bust hub for obverse dies of 1794 half cents and a complete, or nearly complete, reverse hub. The bust hub, which faced to the right, was used on three of the five obverse dies for 1794 and the reverse hub was used for three of the reverses. (Breen says that

Scot prepared a matrix (die surface) from which the hub was raised. Cohen talks only of the hub. Breen states that the reverse hub contained all letters, fraction, and wreath (p. 87) while Cohen believes the fraction and berries were added later. In either case, the reverse dies prepared from the hub turned out so weak that extensive hand labor was required to make them suitable for striking coins. Thus, the labor savings were lost, which may explain why reverse hubs were not used again until 1802 when only the wreath was hubbed. In 1809, the words HALF CENT and the dash below those words were added to the hub and, in 1840 after the introduction of the steam press in 1836, the entire reverse was hubbed. Two sizes of edge lettering (large and small) were used in 1794. On both, the word DOLLAR is followed by only one leaf.

1795 is a truly interesting year for half cents. The half cents of 1793 and 1794 were struck from rolled out copper sheets that had either been purchased by the mint or prepared by the mint's melter and refiner. The rollers, which rolled copper ingots and sheets into strips of the proper thickness for cutting into proper weight planchets, gave the mint substantial problems during this period. By the end of 1794, the mint had used all the half cent planchets it had on hand. Priority in 1795 was given to striking gold and silver coins and no half cents were minted until October of that year. Planchets for these coppers

were made by reprocessing cent and half cent clipping left over from the 1794 production. The design for the 1795 half cents is attributed to John Smith Gardner, the Assistant Engraver. Gardner prepared a bust hub for the 1795 half cents, smaller than those on Scot's 1794 issues, which was used through the 1797 issues. He cut the reverse dies by hand and these were similar in style to the 1794 reverse dies. The edge lettering on the early 1795 half cents was similar to, but different from the 1794 large edge lettering.

An Act of March 3, 1795 authorized the president to reduce the weight of copper coins. In November 1795, Elias Boudinot was named Director of the Mint. He suspended work on copper coins on December 3, 1795 and wrote to both President Washington and Thomas Jefferson, Secretary of State and responsible for mint activities, stating that the weight of both the cent and half cent should be reduced because the price of copper had risen. President Washington authorized reducing the weight of cents from 208 grains to 168 grains and that of the half cents from 104 grains to 84 grains. Cent production resumed on December 28, 1795, but half cent production not until the middle of January 1796 using 1795 dies. These thin planchet half cents can be distinguished by their lack of edge lettering.

Another interesting thing (in addition to the weight

reduction) happened in December 1795. The mints melter and Refiner refused to melt down a group of spoiled large cents and instead returned them to the Chief Coiner (Henry Voigt) to be cut into half cent planchets and struck as half cents. These were not used immediately, but were used apparently on February 28, 1796. On March 9, 1796 another batch of spoiled large cents was cut down and restruck as half cents. Some, perhaps all, of these cents were not passed through the rollers to thin them to half cent thickness, so the half cents struck from them are overweight. The mint must have decided that restriking cents was a practical exercise because it cut down 1,076 pounds of Talbot, Allum, and Lee tokens which it had purchased on April 5, 1795 and made them into half cents during late March 1796. Some 50,000 to 52,000 half cents dated 1795 are estimated to be struck over TAL tokens. This is almost half the estimated mintage with the 1795 date. All in all, almost 80 percent of half cents dated 1795 were struck in 1796.

Talbot, Allum, and Lee imported goods from India and had contracted with Peter Kempson and Company of Birmingham, England for at least two tons of tokens. These tokens are dated 1794 and 1795. Most were struck at 46 to the pound (152.17 grains) but some were struck at 50 to the pound (140 grains). The 1794 tokens carried the edge lettering PAYABLE AT THE STORE OF while the 1795s were lettered WE PROMISE TO PAY THE BEARER ONE CENT.

Occasionally, one finds 1795 half cents with a portion of the TAL edge lettering visible. (Easier to cut the half cent planchet.)

The mint must have gotten a relatively good deal on the tokens because it purchased another 1,914 pounds of them on December 12, 1796 and used them for striking 1797 half cents. The firm dissolved in 1798.

1795 is also an important year because there are at least three half cents struck over copper trial pieces for half dollars, two 1794 (Overton 104 and 105) and one 1795 (Overton 117).

Few of the half cents struck in 1796 carry that date. Both Cohen and Breen estimate that 1,390 half cents carry that date. It is possible that the 1,740 half cents delivered to the Mint Treasurer on June 8, 1796 were dated 1796. In this case, the mintage would more than double to 3,130 pieces. The planchet quality for the 1796 half cents is particularly poor although only one is definitely known struck over a cut down large cent.

1797 is another interesting year. Dies were by Robert Scot using Gardner's bust hub. Half cents were again struck on mint-prepared planchets, cut down TAL tokens, and cut down large cents. Most were on TAL tokens. Some 107,000 half cents were

delivered to the Mint Treasurer in the spring of 1797. Another 12,170, which Cohen thinks were minted in 1797 were delivered to the Mint Treasurer in 1799. These coins may have been minted in 1799. Finally, in the first half of 1800, almost 21,000 half cents were delivered. These were all struck from cut down large cents and most, but not all were dated 1797. This last group is thought to include the 1797 low head varieties.

It is estimated that some 90,000 of the 128,000-140,000 half cents dated 1797 were struck over TAL tokens. Between 10,000 and 22,000 were struck over spoiled large cents. Some of the 22,000 were dated 1800, but no one knows how many. Cohen thinks almost 12,500 of these were dated 1800, but I would estimate that about 20,000 were dated 1797. Half cents dated 1800 with cent undertype are too scarce and low head half cents of 1797 too common for Cohen's estimate to be valid.

The 1797 low head varieties include plain edge, lettered edge, and gripped edge specimens. The plain edge is by far the most common. It is unknown if there is any significance to the lettered edge or gripped edge treatments. These varieties come on smaller planchets than most half cents of 1794-1797 (7/8" versus 15/16") and tend to be underweight or overweight. I believe the underweight planchets were struck from large cents that had been put through the rollers prior to cutting the half

cent planchets from them and the overweight ones from cents not put through the rollers.

In 1800, Mint Director Boudinot ordered a large quantity of large cent and half cent planchets from Boulton and Watt. Breen says these planchets were ordered in early April, but Cohen says they were shipped from England on April 19, 1800. Both cannot be correct. Perhaps Breen's date is when Boulton received Boudinot's order. Six casks of planchets totalling some 192,000 half cent planchets arrived on July 8, 1800. Most 1800 dated half cents are struck on these Boulton planchets and most of the Boulton planchets (some 190,550) were used for the 1800 half cents.

No more half cent planchets were received from Boulton & Watt until November 1803. Almost all half cents dated 1803 through 1811 were struck on Boulton planchets.

As most of you are no doubt aware, the Pole-to-Cap style of cent ended in 1796 when the Draped Bust cent was introduced. (It was introduced on the dollars in 1795.) Half cents did not change to the draped bust style until 1800 and were the last denomination to make the change. The design was by Gilbert Stuart. Robert Scot created the bust hub for the draped bust half cents. Cohen is of the opinion that the hub included marks

showing the desired placement of the E in LIBERTY and the 180 of the date.

The half cents of 1802 are interesting for two reasons--it is the first overdate year and all 1802 half cents are allegedly struck over cut down spoiled large cents. Most come on dark, porous planchets which Cohen speculates was caused by the cent planchets being annealed prior to rolling. This softened the metal putting less strain on the rollers, but also making the pieces more susceptible to corrosion. Some 1802-dated half cents may have been struck in 1803 as 5,900 half cents were struck from spoiled cents by August 8th of that year, but no 1803 is known struck over a large cent. Several half cents of 1804 and 1806 are suspected of being struck over spoiled large cents.

1802 also saw the making of a reverse hub. The hub contained the wreath lacking the berries and stem ends. It contained marks for the Es of UNITED, STATES, and AMERICA, for the letters of HALF CENT, and the fraction bar. This hub was used for the remainder of the draped bust series (through 1808).

In July 1803, August 1803, September 1804, and August 1807, Boulton shipped more than 4.5 million half cent planchets to the U.S. mint. Both the 1803 shipments (more than 1.8 million planchets) reached the mint in November of that year. These

planchets and those that followed in November 1804 (almost 1.9 million planchets) and in October 1807 (about 930,000 planchets) would provide the mint with its half cent planchet needs through 1811.

With a large supply of planchets, half cent production began in earnest and quality deteriorated. Both Cohen and Breen believe a large portion of the more than one million half cents struck in 1804 were dated 1803. Breen believes that a shortage of die steel caused mint workers to use several dies long after they had begun to fall apart (at least on of the dies on 7 of the 12 varieties for 1804 show substantial cracking or breaking (cuds)). Both Cohen and Breen believe many coins were struck after their alleged date of issue. Cohen and Breen agree that coins dated 1803 and 1804 were struck in 1805. Breen suggests that half cents dated 1804 and 1805 may have been struck in 1806, but Cohen is silent on this in his book. Both believe 1806-dated half cents were struck in 1807 and Breen posits that earlier dated half cents may have been struck in 1808.

1808 is important, not only because it is the last year of the draped bust series, but because it is the year of the second overdate in the half cent series. One of the 2 overdate varieties is among the scarcest of all half cent varieties.

In 1807, John Reich was named Assistant Engraver and began the task of replacing the Scot draped bust coinage with what we now call classic head coins. Reich, a German, had sold himself into indentureship to avoid war and arrived in the U.S. in 1801. Henry Voigt, the mint's Chief Coiner, bought Reich's indenture and put him to work in the mint at tasks other than engraving. Robert Scot was not enthusiastic about having a talented Assistant. In 1807, the new Mint Director, Robert Patterson, asked President Jefferson to name Reich Assistant Engraver. Jefferson did so.

The first coins struck from Reich's dies (half eagles and half dollars) went into circulation in September 1807 and his cents in 1808. The change in the design of the half cents lagged behind as it did when the draped bust style was issued. Reich's half cent design made its appearance in 1809.

Reich prepared a hub of the bust, now facing left, for the obverse. Stars and the date were punched in individually. His reverse hub consisted of a single continuous wreath with HALF CENT and a line under CENT contained within. UNITED STATES OF AMERICA was added by hand.

1809 was the highest mintage year for half cents with over 1.15 million being struck (Cohen thinks it is not currently so

common as the mintage should indicate). This is despite the fact that the mint had over 350,000 half cents on hand at the end of 1808. Cohen supposes that Mint Director Patterson desired to use up the remaining half cent planchets and to keep mint workers busy. 1809 is a low mintage year for cents because of a planchet shortage, so increasing the production of half cents would allow Patterson to keep his work force busy. Undoubtedly the quality of the die steel improved by 1809 because only one die failed.

In 1811, the mint used up its supply of half cent planchets and Patterson did not order any more from Boulton and Watt. The planchets for 1811 tend to be very poor, the worst, by far, since 1802. I believe that some of the planchets suffered sea water damage on their trip from England and mint employees tossed these aside as they used up the half cent planchets. In 1811, being ordered to use all remaining planchets, they used the poor quality planchets previously passed over.

No half cents were minted during the 1812-1824 period. In large part, this was due to the large supply of half cents on hand at the mint. Cohen also thinks that Mint Director Patterson held the half cent in low regard and would not authorize its production during the remainder of his tenure.

Half cent production resumed in the last quarter of 1825 when the mint could not fill a large order for the denomination from Jonathon Elliot and Sons of Baltimore, MD. Even though Scot had produced a new cent design in 1816, the matron head, Samuel Moore, the new Mint Director, decided against copying that design for the half cents. No doubt, his decision was based in part on the fact that Reich's hubs for the classic head design were still in good condition. These hubs were used by William Kneass, the Mint Engraver of that period, to strike the new dies.

In 1817 the mint began producing proof cents. Proof half cents were issued for every year of half cent issue beginning with the resumption of their mintage in 1825 to the end of the series in 1857. The only exception was 1853, a year for which no proof half cents are known.

There is much speculation of where the half cent planchets for the years 1825 to 1836 came from. It is known that in 1824, Moore wrote Boulton inquiring about the cost of 10 tons of prepared planchets (almost 1.9 million planchets) and was quoted a price, but there is no record that any planchets were ordered from Boulton (or any other source). Such an order would have filled most of the mint's half cent planchet requirements for the 1825-1835 period when just over 2.2 million half cents were minted.

Mintage figures show that 63,000 half cents were minted in 1825, about the same number as minted in 1811, but the 1825 is much more common. Undoubtedly many half cents delivered to the Mint Treasurer in 1826 were dated 1825. Breen also thinks 1826-dated half cents were delivered in 1828.

Mintage of circulation strike half cents ended for 13 years again in 1835. The mint had sufficient quantities on hand that no new production was needed. Aside from proof issues, no new half cents would be struck until 1849. Proof half cents only were struck in 1836 and 1840-1848. These evidently were intended to satisfy demand from collectors.

The design of half cents from 1840 on were Gobrecht's braided hair. Speculation is that Gobrecht completed his half cent matrices and hubs in 1839 because the design is so similar to the final cent design for that year. Because of the new, more powerful steam engines which drove the mint's equipment, it was now possible to hub all features of the obverse and reverse die (except for the date). The steam engines provided the power necessary to impress the working dies with the complete design from the hub. Gobrecht's hubs (matrices) contained the entire obverse and reverse design including all lettering and denticles except for the date. The exact placement of all devices on all

coins of a particular denomination was seen to be a great anticounterfeiting device.

Planchets for the proof only years were probably prepared at the mint. When coining of circulation-strike half cents resumed in 1849, the mint contracted with Crocker Brothers of Taunton, Mass for half cent planchets. (Crocker Brothers also supplied large cent planchets at this time.) This was the source of planchets through the end of regular half cent production in 1857. These planchets are slightly smaller in diameter and thicker than earlier planchets. The copper also seems to be softer. I have found that rim bruises are much more common on braided hair half cents than on other types.

In 1856 and possibly as early as 1854, the mint experimented with a different metal. A copper nickel alloy was used on some planchets struck with 1856 half cent dies. These pieces are either 90% copper and 10% nickel or 88% copper and 12% nickel. The Congress was debating whether to authorize a new small cent at that time and 50 half cents were reportedly struck to show the striking properties of the new alloy. These pieces are thinner than regular half cent issues and weigh either 69 grains (90% copper alloy) or 72 grains (88% copper alloy). They tend to be weakly struck at the rims and denticles.

The Act of February 21, 1857 abolished the half cent as a denomination. Most of the 35,180 half cents minted on January 14, 1857 were retained by the mint and melted down.

January 1857 does not mark the end of half cent coining at the mint, however. Collector demand was beginning to develop and the mint restruck issues, certainly proof issues and less certainly circulation strike issues, through at least 1860 and perhaps as late as 1868.

Circulation strike half cents are dated for 33 of the 65 years during which half cents were occasionally minted. Another 11 years carry the dates when proofs, but no circulation strikes, were minted. Slightly fewer than 8 million (7,985,226) circulation strike half cents and an unknown quantity of proof half cents were minted. Classic head half cents had the greatest mintage (3,637,912 pieces of 25 (Cohen) varieties), but the 1831 is the single most difficult year of half cent to obtain. Almost as many draped bust half cents were minted (3,416,950 pieces in 31 varieties). More than half a million braided hair half cents were minted (544,510 pieces in 8 varieties), but many of these, especially of the 1857 mintage were melted down. The pole-to-caps were the lowest mintage type of half cent (385,854 pieces minted of the 35 varieties.)

The material in this brief half cent history was taken primarily from the half cent books by Roger Cohen (American Half Cents: The little half sisters (2nd Edition)) and Walter Breen (Walter Breen's Complete Encyclopedia of Half Cents). Material was also obtained from Don Taxay's The U.S. Mint and Coinage and various articles on half cents published in Penny-Wise, the official publication of the Early American Coppers, Inc.

Definitions

1. Type -- A distinctive device style for a die. Most often linked with obverse dies (Pole-to-Cap, Draped Bust, Classic Head, Braided Hair), but can also refer to reverse dies (chain, wreath, Lincoln Memorial, etc.)

2. Subtype -- Coins struck from dies of a specific type (say, Pole-to-Cap) but with identifiable differences (Head Left, Head Right and among the Head Right Subtypes, further subtypes of Large Head Right (1794) and Small Head Right (1795-1797)

3. Variety -- All coins struck from a given set (usually pair) of dies. To be a distinct variety, there must be enough of a variation to distinguish at least one of the dies from all others of its basic design. One die can be used to strike more than one variety, if it is combined (usually paired) with identifiably different dies. Some disagreement of whether one counts only the obverse and reverse dies, or if one counts edge devices also. For most years, it makes no difference. Of concern only in 1794, 1795, and 1797 among half cents.

4. Subvariety --Coins of a particular variety that can be distinguished from each other on the basis of some characteristic other than dies. For example, struck on different metals, struck on identifiably different planchets, and, for some, having different edge treatments.

5. Die state -- An identifiable condition of the die as imparted to the coin. Most often die cracks, breaks, cuds, flow lines, bulges, clash marks, damage, lapping, file marks, engraver scratches, etc.

V. Reasons to Collect Half Cents

1. Smallest denomination -- handled by many, rich and poor
2. Obsolete -- most today never heard of half cents, historical
3. Challenge -- small total mintage, low mintage years, several difficult to obtain varieties, especially if you collect proofs
4. Lots of varieties -- enough to make an interesting collection, some scarce enough to present a real challenge
5. Many ways to collect -- set your own challenge and modify as you go along
6. Prices for many are moderate -- Many F-VF examples in the $50-100 range
7. Relatively few collectors -- but a strong camaraderie and a willingness to share
8. Two excellent books and other available information
9. Sold early in auctions -- time for other activities like dinner or sleep
10. May turn out to me a good long-term investment
11. Fun

VI. Ways to Collect Half Cents

1. By type -- (Pole to Cap, Draped Bust, Classic Head, Braided Hair)
2. By subtype -- (Head Left, Head Right or perhaps Large Head Right and Small Head Right too)
3. By date -- (With or without proof only years)
4. By Red Book Variety -- (4 vars 1795, 2 of 1796, 4 of 97, 2 of 1802, 5 of 1804, 3 of 1805 and 1806, 2 of 1808, 3 of 1809, 2 of 1828 and 1 of all other, plus original and restrikes of some proof years)
5. By variety -- Cohen, Breen, or Gilbert (most collectors, circ strikes only)
6. By die states (More and more collectors of die states)
7. By presidency
8. Circulation strike only
9. Proofs only
10. Die states of selected varieties (Spiked chin, 1828 12 star)
11. Varieties within one, two, or three types
12. Errors and oddities
13. High grades only (a real challenge for some years/varieties)
14. Low grades only
15. Color
16. Whatever you like -- keep it fun, or find a new hobby
17. Knowledge

Emphasis in this course is on varieties

VII. Attributing Half Cents

As I indicated earlier, there are on the order of 140 half cent varieties if one includes both circulation-only and proof strikes. Some of these are quite rare and worth a substantial premium to collectors trying to put a variety set or die state set together. Therefore, it will pay you to become proficient at attributing half cents, even if you decide not to collect them.

Fortunately, the mint made your task relatively easy in that there are only 5 years with more than 4 varieties (1794, 1795, 1797, 1804, and 1809). To attribute a coin, you must be able to identify the unique characteristics of the obverse and reverse dies. In general, I find it easier to identify the reverse die than the obverse. This is because there are many more points of potential differences on the reverse.

The obverse shows the bust, LIBERTY above, and the date below. Not many points of reference. For most dates, the bust was placed on the die by use of a hub. The letters of LIBERTY and the date were then punched in separately. Occasionally, the bust was punched high or low on the die, and the die can be identified on that basis alone. On other varieties, the style of number punch may differ from die to die in a given year or some of the numerals may be repunched or overpunched. More often, the obverse die must be identified on the basis of the letters or numerals in relation to the bust, or to each other.

The reverse, on the other hand, has many points of reference (until the steam-powered press allowed hubbing of the full reverse). Each leaf tip and berry in relation to the letter above it is a potential point of reference. So too is the angle and placement of the wreath stem in relation to the final A in AMERICA.

Engraver scratches and die cracks and breaks are also useful in identifying a die, obverse or reverse. So, too, are overstrikes, omissions of some die characteristic, corrected punches, bulges, and specific variety characteristics such as rotated dies or weakness of strike in specific areas.

As we take the year-by-year tour of half cents, I will relate my key attribution guides for varieties of a given year. At the end of the tour, we will have an attribution exercise to give you some practice.

I encourage you to develop and use your own guides. Use what works for you. Early on, I decided to use flash cards to help me with my identification. Put the year and variety number

on one side, and characteristics on the other. Then test yourself when you have some free time until you recognize all varieties.

XII. Sources of Information on Half Cents

1. Literature

   a. Books

      1. Cohen American Half Cents: The Little Half Sisters 1st (1971) or 2nd (1982) edition

      2. Breen Walter Breen's Encyclopedia of United States Half Cents (1983)

      3. Gilbert United States Half Cents (1916)

      4. Frossard Monograph on United States Cents and Half Cents (1878 (1879))

      5. Breen Walter Breen's Complete Encyclopedia of U.S. and Colonial Coins (1988)

      6. Yeoman A Guide Book of United States Coins (yearly)

   b. Auction Catalogues and Fixed Price Lists

      1. Roger Cohen (Superior 2/2/92)
      2. Jack Robinson (Superior 1/29-30/89)
      3. Norweb I (Bowers and Merena 10/12-13/87)
      4. Robison (Stacks (2/10-13/82)
      5. Spence (Stacks 3/15/75)
      6. Brobston (Stacks 1963 FPL)
      7. Ryder (New Netherlands 44th, 1954)
      8. Anderson-Dupont (Stacks 11/11-13/54)
      9. Alvord (S.H Chapman 6/9/24)
      10. Many others (McCawley-Grellman Mail Bid Sales)

   c. Other Publications

      1. Coin World
      2. Numismatic News
      3. The Numismatist (Ross 1915-1916)
      4. Copper Quotes by Robinson (CQR)
      5. Penny-Wise EAC bi-monthly publication
      6. 1/200 Survey (165 collections)

   d. Dealers specializing or knowledgeable in half cents

      1. Jim McGuigan

2. Don Valenziano
3. Steve Fischer
4. Chris McCawley (CVM)
5. Tom Reynolds
6. Rod Widok
7. Jack Beymer
8. Doug Bird
9. Tony Terranova
10. Dealers at coin shows with many half cents

e. Others including collectors

1 Join EAC (write letter to P-W telling of your collecting interest and desire to meet others in your area
2 Come to EAC convention (Half Cent Happening)
3 ANA seminars and convention

October 24, 1994

R. Tettenhorst
P.O. Box 14020
St. Louis, MO. 63178

Dear Tett,

In your Aug 15 letter to me you asked about the relation between Roger and Jack Collins. I knew that there was no love lost between the two of them and that they occasionally exchanged rather vitriolic letters. I know, too, that Roger was accused of writing some letters that he did not write. I believe there were several reasons for their animosity. As you know, Roger and Walter did not always see eye to eye on half cent "facts." Roger felt Walter was often sloppy and too often presented his opinion as fact. Jack always defended Walter and his facts and Roger transfered some of his disregard for Walter to Jack as a result. Jack also lived a lifestyle that Roger strongly disapproved of. Once the negative letters started, they continued. I'm sure there were other reasons for Jack & Roger being on bad terms, but I was not aware of the specifics.

I've added only a lower grade 1809 C-1 to my collection since EAC. I've not seen too many pieces

that I need and wanted in the past 6 months. I haven't added any Mass copper at all!

Dive decided to finish the '94's at the 1995 Half Cent Happening (C-6a, b & C-7), along with 1804 C-6 (by request), and 1809 C-4 and C-6. Please let me know if that meets with your approval. Obviously, I'm assuming you and your coins will be there. If you know you can't make it, I'll substitute '93 C-2 or C-3 for the '94's. I know you have nice '93s, but those 94's - Wow!

I hope all is going well with you, Marilyn, and Davey and with your daughter and family. Take care,

Yours,

Mike

EAC

11/2/94

ERIC NEWMAN

The attached letter from Mike Packar contains an interesting commentary on the Cohen/Collins relationship, concerning which you obtained some material for me. I had written him asking what he knew about this relationship, since he was a close friend of Rogers.

Tett

EPN would like to know more about the background of Jack Collins. His real name??? Some connection with movie industry, etc.?? (Roger "didn't approve of Jack's lifestyle"??)

FROM THE DESK OF BERNARD EDISON

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

November 2, 1994

Mr. Mike Packard
4905 Village Drive
Fairfax, VA 22030

Dear Mike:

Thanks for your response about Roger and Jack Collins. It is helpful additional information.

You asked about EAC '95. I definitely plan to be there and have blocked out my calendar to avoid all conflicts. Of course, the unpredictable is always a slight possibility, but I do not anticipate missing any portion of the show. As to varieties, I am somewhat reluctant to bring my 1794 C7. It is such a special coin, and it is very well illustrated in the color plates of the Breen book for the date. The C6b is also special, of course. However, I suggest that you go ahead and finish the year. We will work something out I suppose, but we might as well face the question now as later and have 1794 finished.

As to the 1804 C6, are you planning to have a special showing by die state? It would be great fun to compare various specimans that are considered to be the same die state to see if there are any minute variations. In fact, a Die State Happening for one variety within the Half Cent Happening might make a popular annual feature.

It was good to hear from you. We are all well, and I hope that the same is true for you and your family.

Sincerely,

Tett

R. Tettenhorst

mb

Michael D. Packard
4905 Village Drive
Fairfax, VA 22030

Feb 23, 1997

Dear Tett,

Sorry it has been so long since I last wrote. I received your kind invitation to the grand opening of the local Bunter and Daver, but was not able to attend. It seems to be very popular according to the local press. I certainly hope that endeavour is as profitable as it seems.

I just wanted to let you know that work will likely keep me from attending EAC this year. We have quite a lot going on with more requests arriving regularly. The Congress would like us, GAC, to provide them

both wrote a lot of reports and Testimonies from March through May. I hope you have a great time

Please keep in touch,

Mike

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

March 20, 1997

Mr. Michael D. Packard
4905 Village Drive
Fairfax, VA 22030

Dear Mike:

Thanks for your note of February 23. We will miss you at EAC both personally and numismatically. You are a key member of the half-cent fraternity and a real contributor to the knowledge of the rest of us.

We also missed you at the opening of Dave & Buster's but understand that you are a busy guy, and it is a long way from home. If you are ever near the White Flint Shopping Center, you may want to stick your nose in and walk around or have lunch, etc. It is really a fun place.

Sincerely,

Tett

R. Tettenhorst

mb

4905 Village Dr
Fairfax VA 22030

June 21, 1998

Tett,

I'm afraid I cannot help you much in your quest for information on half cents struck over non-TAL and non-cent planchets, I found a reference in CNL about a 1797 cent struck over a Mass half cent (copy attached) but do not know of its whereabouts. I have no idea if the information was correct or where the coin, if it exists, currently resides. Until I received your letter, I was unaware of the 1795 struck over the Immune Columbia.

I'll ask a couple of contacts if they are aware of either coins' whereabouts and let you know if I hear anything useful.

Sincerely,
Mike Packard

Attachment

(See next page for update)

Tett,

Just got off the phone with Fred Borchert who has a copy of Wayte Raymond's 1953 Standard Catalogue of U.S. Coins. He indicated that on page 49 under the 1797 half cents was the statement "we have records" of half cents for this year being struck over Most half cents and TAL's. The "we" apparently refers to Raymond, Walter Breen who did the research, and John Ford. You might be able to get some information by contacting Ford and/or whoever has Walter's notes.

Mike